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ENVIRONMENTAL RESEARCH PUBLICATIONS, 1971-1975

National Environmental Research Center
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January 1975

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16. ABSTRACT

This list of Publications has been created to announce reports and publications of the U.S. Environmental Protection Agency's National Environmental Research Center (NERC) in Cincinnati. This literature reports on results of scientific and engineering studies on pollution control technology performed by intramural activities of the NERC-Cincinnati laboratories or by cooperative activities with research and industrial organizations through contracts and grants. This publication is not intended to be a complete reference of all the technical publications of the U.S. Environmental Protection Agency. Rather, it is a selected list of those publications from the National Environmental Research Center in Cincinnati.

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U.S. Environmental Protection Agency
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Information Coordinator Section/TSD
Division of Pesticides Program WH 569
Office of Pesticides Programs
U.S. Environmental Protection Agency
Washington, D.C. 20460

Radiation Research:

Office of Radiation Programs
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FOREWORD

The purpose of this Publications List is to provide the potential user with a guide to technical papers and reports generated from the National Environmental Research Center (NERC) in Cincinnati and is not intended to reference all the technical publications of the U.S. Environmental Protection Agency.

This is one of several efforts undertaken by the Technical Information Staff to provide information and assistance on the availability of documents from the NERC. Although some of the listed publications are no longer available, they are included to assist the reader as background information to the research activities being investigated.

The NERC both conducts and contracts for research in the scientific and engineering interests of the technical and academic communities throughout the United States and the world. The research encompasses most areas of advanced waste treatment, industrial waste treatment, methods development and quality assurance, environmental toxicology, solid and hazardous waste, and water supply.

Environmental Research Publications is divided into sections listing reprints and journal proceedings; reports completed by contract, grant and in-house; and miscellaneous publications including newsletters issued by the Center.

Publications in this series will be distributed to requesters as supply permits. Requests should be directed to the Technical Information Staff, National Environmental Research Center, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268. When not available from this Center, copies of reports may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

Gilbert M. Gigliotti, Director
Technical Information Staff
National Environmental Research Center,
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1971
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Sewage effluents and sludge analyses. Treatise on Analytical Chemistry. Editors: I.M. Kolthoff, P.J. Elving and F. Stross. Chapter 47, Part III, 2:563-587, John Wiley and Sons, Inc., 1971.

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McCarthy, L.T., Jr., I. Wilder, and J.S. Dorrler.
Project Officer: None.
Standard dispersant effectiveness and toxicity tests. 57 pp., May 1973. (Order thru GPO, $.90)

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Bianchi, R.A. and G. Henry.
Project Office: EWQRL Staff.
The development and demonstration of an underwater oil harvesting technique. 86 pp., Apr. 1973. (Order thru GPO, $1.25; or NTIS, PB-221 431, $3.25)

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Almgren, H.
Project Officer: Stern, G.
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Thackston, E.L.
Project Officers: Westrick, J.J. and J.F. Kreissl.
Secondary waste treatment for a small diversified tannery. 75 pp., Apr. 1973.
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Wehking, M.W., et al.
Project Office: AWTRL Staff.
Stabilization of sewage solids by the channel aeration process. 95 pp., June 1973. (Order thru NTIS, PB-223 134, $6.75)

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Project Office: EWQRL Staff.
Oil spill surveillance system study. 215 pp., May 1973. (Order thru GPO, $2.60)

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Miller, J.W.
Project Officer: Hornstein, B.
A multiparameter oil pollution source identification system. 173 pp., July 1973. (Order thru GPO, $1.85)

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Nebolsine, R., I. Pouschine, Jr., C.Y. Fan, et al.
Project Officer: Kreissl, J.F.
Ultra high rate filtration of activated sludge plant effluent. 114 pp., Apr. 1973. (Order thru GPO, $2.10)

R2-73-223

Renn, C.E.
Project Officer: Skovronek, H.
Management of recycled waste-process water ponds. 49 pp., May 1973. (Order thru GPO, $.85)

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Bargman, R.D. and J. Borgerding.
Project Officer: Smith, R.
Characterization of the activated sludge process. 63 pp., Apr. 1973. (Order thru GPO, $.95)

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Kaminsky, E.L., W.F. Roberts, and J.C. Volk, Jr.
Project Officer: Librizzi, W.J., Jr.
Marine sanitation system demonstration. 105 pp., May 1973. (Order thru GPO, $1.25)

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Thomas, D.G., R.B. Callaher, and J.S. Johnson, Jr.
Project Officer: Smith, J.M.
Hydrodynamic flux control for waste water application of hyperfiltration systems. 80 pp., May 1973. (Order thru GPO, $1.25)

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Kosowski, Z.V.
Project Office: Mine Drainage Pollution Control.
Control of mine drainage from coal mine mineral wastes. 83 pp., May 1973. (Order thru GPO, $1.25)

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Dolan, F.X. and J.P. Bowersox.
Project Office: EWQRL Staff.
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Bechtel Corporation.
Project Officer: McMichael, W.F.
Cost estimating guidelines for wastewater treatment systems. 102 pp., 1973. (Order thru NTIS, PB-215 516, $7.25)

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Derick, C. and K. Logie.
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Flow augmenting effects of additives on open channel flows. 74 pp., June 1973. (Order thru GPO, $1.00)

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Filar, H., Jr.
Project Officer: Stern, G.
Desal ion exchange for demineralization at Santee, California. 215 pp., May 1973. (Order thru NTIS, PB-220 123, $3.00)

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Filar, H., Jr.
Project Officer: Stern, G.
Carbon adsorption and electrodialysis for demineralization at Santee, California. 443 pp., May 1973. (Order thru NTIS, PB-220 360/2, $6.00)

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Project Office: EWQRL Staff.
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Project Officer: Ciancia, J.
Water pollution control in the primary non ferrous metals industry - Vol. I, Copper, zinc, and lead industries. 168 pp., Sept. 1973. (Order thru GPO, $1.90)

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Project Officer: Dean, R.B.
Sludge processing for combined physical-chemical-biological sludges. 141 pp., July 1973. (Order thru GPO, $2.10)

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Mitchell, R.C., C.L. Hammermesh, and J.V. Lecce.
Project Officer: Wilder, I.
Feasibility of plastic foam plugs for sealing leaking chemical containers. 60 pp., May 1973. (Order thru GPO, $.85)

R2-73-257

Field, R., E.J. Struzeski, Jr., H.E. Masters, et al.
Project Officer: None
Water pollution and associated effects from street salting. 48 pp., May 1973. (Order thru GPO, $.85)

R2-73-261

Shelley, P.E. and G.A. Kirkpatrick.
Project Officer: Field, R.I.
An assessment of automatic sewer flow samplers. 233 pp., June 1973. (Order thru GPO, $2.60)

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Seiler, F.L. and J.W. Altman.
Project Officer: McMichael, W.
Guide to the preparation of operational plans for sewage treatment facilities. 212 pp., July 1973. (Order thru GPO, $2.60)

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Burns, D.E. and G.L. Shell.
Project Officer: Westrick, J.J.
Physical-chemical treatment of a municipal wastewater using powdered carbon. 230 pp., Aug. 1973. (Order thru GPO, $2.25)

R2-73-270

Mekosh, G. and D. Ramos.
Project Officer: Kreissl, J.F.
Pressure sewer demonstration at the borough of Phoenixville, Pennsylvania. 70 pp., July 1973. (Order thru GPO, $1.00)

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Schultz, J.S.
Project Officer: Chambers, C.W.
Electrical stimulation of microbial waste treatment. 53 pp., June 1973. (Order thru NTIS, PB-222 384/0, $3.50)

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Zanoni, A.E.
Project Officer: Barth, E.F.
Phosphorus removal by trickling filter slimes. 122 pp., July 1973. (Order thru GPO, $2.10)

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Smith, R.
Project Officer: None.
Electrical power consumption for municipal wastewater treatment. 89 pp., July 1973. (Order thru GPO, $1.25)

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Opferkuch, R.E., T. Ctvrtnicek, et al.
Project Officer: Farrell, J.B.
Study of utilization and disposal of lime sludges containing phosphates. 119 pp., June 1973. (Order thru NTIS, PB-222 354/3, $8.00)

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Pitt, R.E. and G. Amy.
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Toxic materials analysis of street surface contaminants. 133 pp., Aug. 1973.
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Tuwiner, S.B.
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Investigation of treating electroplaters cyanide waste by electrodialysis. 48 pp., Dec. 1973.
(Order thru GPO, $.90)

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Rudder, C.L., A.G. Wallace, and C.J. Reinheimer.
Project Office: EWQRL Staff.
Aerial detection of spill sources. 23 pp., Sept. 1973.
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Chansky, S., B. McCoy, and N. Surprenant.
Project Office: EWQRL Staff.
Waste automotive lubricating oil as a municipal incinerator fuel. 74 pp., Sept. 1973.
(Order thru GPO, $1.05)

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Regan, R, J.S. Deris, R. Gasser, et al.
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Cellulose degradation in composting. 153 pp., Mar. 1973.
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Project Officer: Clemons, C.A.
Photosynthetic reclamation of agricultrual solid and liquid wastes. 94 pp., Aug. 1973.
(Order thru NTIS, PB-222 454, $3.75)

R4-73-011

Darby, R.L. and R.L. Little.
Project Officer: Weber, C.I.
Operation of the analytical methodology information center. 162 pp., Apr. 1973.
(Order thru GPO $2.35)

R4-73-014

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Project Officer: None.
Procedures for radiochemical analysis of nuclear reactor aqueous solutions. 174 pp., May 1973.
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670/1-73-036

ETRL, NERC-Cincinnati, Ohio
Project Officer: Stara, J.F.
Annual report for calendar year 1972. Environmental Toxicology Research Laboratory.

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Currier, R.A. and M.L. Laver.
Project Officer: Carnes, R.A.
Utilization of bark waste. 165 pp., July 1973. (Order thru NTIS, PB-221 876, $6.00)

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Fleischer, L.R.
Project Officer: Clemons, C.A.
Investigation of corrosion deposition phenomena on gas turbine blades. 44 pp., June 1973. (Order thru NTIS, PB-221 095, $3.75)

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Miller, B.F.
Project Officer: Rogers, C.J.
Biological conversion of animal wastes to nutrients. 82 pp., June 1973. (Order thru NTIS, PB-221 171, $4.85)

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Project Officer: Clemons, C.A.
Preparation and evaluation of activated carbon produced from municipal refuse. 150 pp., June 1973. (Order thru NTIS, PB-221 172, $5.45)

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Converse, A.O., H.E. Grethlein, et al.
Project Officer: Rogers, C.J.
Acid hydrolysis of cellulose in refuse to sugar and its fermentation to alcohol. 113 pp., 1973. (Order thru NTIS, PB-221 239, $5.45)

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Booz Allen Applied Research, Inc.
Project Officer: Clemons, C.A.
An analysis of the abandoned automobile problem. 196 pp., July 1973. (Order thru NTIS, PB-221-879, $6.00)

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A study of hazardous waste materials, hazardous effects and disposal methods, Volume I. 408 pp., July 1973. (Order thru NTIS, PB-221 465, $10.60) (3 Volume set, PB-221 464, $21.00)

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Project Officer: Clemons, C.A.
A study of hazardous waste materials, hazardous effects and disposal methods, Volume II. 544 pp., July 1973. (Order thru NTIS, PB-221 466, $12.50)

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Booz Allen Applied Research, Inc.
Project Officer: Clemons, C.A.
A study of hazardous waste materials, hazardous effects and disposal methods, Volume III. 460 pp., July 1973. (Order thur NTIS, PB-221 467, $10.60)

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First, M.W., C.A. Oviatt, et al.
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Municipal waste disposal by shipborne incineration and sea disposal of residues. 603 pp., July 1973. (Order thru NTIS, PB-221 684, $32.25)

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Wren, E.J.
Project Officer: Clemons, C.A.
Preventing landfill leachate contamination of water. 119 pp., July 1973. (Order thru NTIS, PB-222 468, $4.25)

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Sack, W.A. and S.A. Phillips.
Project Officer: Bunch, R.L.
Evaluation of the bio-disc treatment process for summer camp application. 76 pp., Aug. 1973. (Order thru GPO, $1.05)

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Project Officer: Thurnau, R.C.
Incineration of bulky refuse without prior shredding. 92 pp., July 1973. (Order thru NTIS, PB-221 731, $3.00)

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Project Officer: English, J.N.
Instream aeration to control dissolved sulfides in sanitary sewers. 92 pp., July 1973. (Order thru NTIS, PB-223 342, $7.25)

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Miner, J.R.
Project Officer: Clemons, C.A.
A recirculating waste system for swine units. 247 pp., July 1973. (Order thru NTIS, PB-221 621, $14.50)

670/2-73-027

Torpey, W.N., H. Heukelekian, and A.J. Kaplovsky.
Project Office: AWTRL Staff.
Rotating biological disk wastewater treatment process - Pilot plant evaluation. 250 pp., 1973. (Order thru NTIS, PB-232 133, $6.00)

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Sallo, F.W., Jr., H.F. Mueller, and T.E. Larson.
Project Officer, Chambers, C.W.
Disinfection of sewage effluents. (Order thru NTIS, PB-222 355, $6.00)

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Kelly, J.A.
Project Officer: Rogers, C.J.
Radiolytic hydrolysis of cellulose. 26 pp., July 1973. (Order thru NTIS, PB-221 877, $3.00)

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Project Officer: English, J.N.
U-tube aeration. 186 pp., Sept. 1973. (Order thru GPO, $2.00)

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Vaughan, D.A. and P.D. Miller.
Project Officer: Clemons, C.A.
First annual progress report on a study of corrosion in municipal incinerators. 44 pp., July 1973. (Order thru NTIS, PB-221 851, $3.75)

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Project Officer: Bishop, D.F.
Hydrogen peroxide cures filamentous growth in activated sludge. 20 pp., Oct. 1973. (Order thru GPO, $.65)

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Project Officer: Clemons, C.A.
Wood waste reuse in controlled release pesticides. 96 pp., July 1973. (Order thru NTIS, PB-222 051, $4.85)

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Hais, A.B., J.B. Stamberg, and D.F. Bishop.
Project Officer: Bishop, D.F.
Alum addition to activated sludge with tertiary solids removal. 25 pp., Aug. 1973. (Order thru GPO, $.65)

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Malisch, W.R., D.E. Day, and B.G. Wixson.
Project Officer: Clemons, C.A.
Use of domestic waste glass for urban paving. 106 pp., July 1973. (Order thru NTIS, PB-222 052, $6.45)

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Pyrolysis of solid municipal wastes. 79 pp., 1973. (Order thru NTIS, PB-222 015, $4.85)

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O'Farrell, T.P., D.F. Bishop, and A.F. Cassel.
Project Officer: Bishop, D.F.
Nitrogen removal by ammonia stripping. 23 pp., Sept. 1973. (Order thru GPO, $.65)

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Project Officer: Clemons, C.A.
The effect of processing poultry manure on disease agents. 36 pp., July 1973. (Order thru NTIS, PB-222 148, $4.00)

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Wilcox, E.A. and S. Akinbami.
Project Officer: Bishop, D.F.
Activated sludge process using pure oxygen. 48 pp., Feb. 1974. (Order thru GPO, $.95)

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Parkhurst, J.D., R.F. Rodrigue, R.P. Miele, et al.
Project Officer: Dean, R.B.
Summary report: pilot plant studies on dewatering primary digested sludge. 202 pp., Aug. 1973. (Order thru GPO, $2.10)

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Smith, R, R.G. Eilers, and E.D. Hall.
Project Officer: None.
Mathematical model for post aeration. 44 pp., July 1973. (Order thru NTIS, PB-222 031, $3.75)

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Smith, R, R.G. Eilers, and E.D. Hall.
Project Officer: None.
A mathematical model for aerobic digestion. 50 pp., July 1973. (Order thru NTIS, PB-222 029, $3.75)

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Smith, R., R.G. Eilers, and E.D. Hall.
Project Officer: None.
Design and simulation of equalization basins. 58 pp., July 1973. (Order thru NTIS, PB-222 000, $4.50)

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Project Officer: Bunch, R.L.
Methods for improvement of trickling filter plant performance - Part I. Mechanical and biological optima. 235 pp., Aug. 1973. (Order thru GPO, $2.30)

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Project Officer: Brenner, R.C.
Methods for improvement of trickling filter plant performance. Part II. Aug., 1973. (Pending)

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Iglar, A.F. and R.G. Bond.
Project Officer: Clemons, C.A.
Hospital solid waste disposal in community facilities. 350 pp., July 1973. (Order thru NTIS, PB-222 018 $9.00)

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Project Officer: Clemons, C.A.
Combustion projects from the incineration of plastics. 140 pp., July 1973. (Order thru NTIS, PB-222 001, $8.00)

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Leary, R.D., L.A. Ernest, R.S. Powell, et al.
Project Officer: Bunch, R.L.
Two hundred MGD activated sludge plant removes phosphorus by pickle liquor. 127 pp., Sept. 1973. (Order thru GPO, $1.50)

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Diesch, S.L., B.S. Pomeroy, and E.R. Albred.
Project Officer: Clemons. C.A.
Survival of pathogens in animal manure disposal. 135 pp., Aug. 1973. (Order thru NTIS, PB-222 337, $4.50)

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Fookson, A. and G. Frohnsdorff.
Project Officer: Rogers, C.J.
The nitrite-accelerated photochemical degradation of cellulose as a pretreatment for microbiological conversion to protein. 102 pp., July 1973. (Order thru NTIS, PB-222 115, $5.45)

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Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. I. Summary report. 212 pp., Aug. 1973. (Order thru NTIS, PB-224 580/AS, $5.50) (053A thru 053P is $72.00 set, PB-224 579)

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Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. IV. Disposal process descriptions: Biological and miscellaneous waste treatment processes. 151 pp., Aug. 1973. Order thru NTIS, PB-224 583/AS, $4.50)

670/2-73-053E

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Project Officer: Schomaker, N.B.
Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. V. National disposal site condidate waste stream constituent profile reports: Pesticides and cyanide compounds. 150 pp., Aug. 1973. (Order thru NTIS, PB-224 584/AS, $4.50)

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Project Officer: Schomaker, N.B.
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Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. VII. National disposal site candidate waste stream constituent profile reports: Propellants, explosives, and chemical warfare materiel. 283 pp., Aug. 1973. (Order thru NTIS, PB-224 586/AS, $6.25)

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670/2-73-053I

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Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. IX. National disposal site candidate waste stream constituent profile reports: Radioactive materials. 173 pp., Aug. 1973. (Order thru NTIS, PB-224 588/AS, $4.75)

670/2-73-053J

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Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. XII. Industrial and municipal disposal candidate waste stream constituent profile reports: Inorganic compounds. 340 pp., Aug. 1973. (Order thru NTIS, PB-224 591/AS, $7.25)

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Project Officer: Schomaker, N.B.
Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. XIV. Summary of waste origins, forms, and quantities. 170 pp., Aug. 1973. (Order thru NTIS, PB-224 593/AS, $4.75)

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Project Officer: Schomaker, N.B.
Recommended methods of reduction, neutralization, recovery or disposal of hazardous waste. Vol. XV. Research and development plans. 115 pp., Aug. 1973. (Order thru NTIS, PB-224 594/AS, $4.25)

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Robins, J.D.
Project Officer: Hill, R.D.
Gas requirements to pressurize abandoned deep mines. 192 pp., Aug. 1973. (Order thru GPO, $2.00)

670/2-73-056

International Research & Technology Corporation.
Project Officer: Albrecht, O.W.
Problems and opportunities in management of combustible solid wastes. 517 pp., Aug. 1973. (Order thru NTIS, PB-222 467, $9.75)

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Schoenberger, R.J. and P.W. Purdom.
Project Officer: Bender, D.F.
A study of incinerator residue analysis of water soluble components. 316 pp., Aug. 1973. (Order thru NTIS, PB-222 458, $7.00)

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Pressley, T.A., D.F. Bishop, A.P. Pinto, et al.
Project Officer: Bishop, D.F.
Ammonia-nitrogen removal by breakpoint chlorination. 45 pp., Sept. 1973. (Order thru GPO, $.95)

670/2-73-059

Field, R.
Project Officer: None
The dual functioning swirl combined sewer overflow regulator/concentrator. 49 pp., Sept. 1973. (Order thru GPO, $2.20)

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Derrington, R.E., D.H. Stevens, and J.E. Laughlin.
Project Officer: Brenner, R.C.
Enhancing trickling filter plant performance by chemical precipitation. 117 pp., Aug. 1973. (Order thru GPO, $1.45)

670/2-73-061

Andrews, J.F. and K. Kambhu.
Project Officer: Brunner, D.R.
Thermophilic aerobic digestion of organic solid wastes. 83 pp., Aug. 1973. (Order thru NTIS, PB-222 396, $6.25)

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Weinberg, M.S., H.K. Weiss, A.L. Palander, et al.
Project Officer: Dean, R.B.
Sludge conditioning using SO_2 and low pressure for production of organic feed concentrate. Aug. 1973. (Order thru NTIS, PB-223 343, $10.50)

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Hortenstine, C.C. and D.F. Rothwell.
Project Officer: Wiles, C.C.
Composted municipal refuse as a soil amendment. 67 pp., Aug. 1973. (Order thru NTIS, PB-222 422, $3.50)

670/2-73-064

Horstkotte, G.A., Jr.
Project Officer: Brunner, C.A.
Pilot-demonstration project for industrial reuse of renovated municipal wastewater. 133 pp., Aug. 1973. (Order thru GPO, $1.55)

670/2-73-065

Grove, C.S. and C.M. Antoni.
Project Officer: Clemons, C.A.
Studies on modifications of solid industrial wastes. 179 pp., Aug. 1973. (Order thru NTIS, PB-222 419, $5.25)

670/2-73-066

Wolk, R.H. and C.A. Battista.
Project Officer: Wiles, C.C.
Study of the technical and economic feasibility of a hydrogenation process for utilization of waste rubber. 150 pp., Aug. 1973. (Order thru NTIS, PB-222 694, $4.40)

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Pontius, U.R., E.H. Pavia, and D.G. Crowder.
Project Office: EWQRL Staff.
Hypochlorination of polluted stormwater pumpage at New Orleans. 188 pp., Sept. 1973. (Order thru GPO, $1.95)

670/2-73-068

Gumtz, G.D. and T.P. Meloy.
Project Office: EWQRL Staff.
Oil recovery system using sorbent material. 159 pp., Sept. 1973. (Order thru GPO, $4.00)

670/2-73-069

Bonz, P.E.
Project Officer: Farlow, J.S.
Fabric boom concept for containment and collection of floating oil. 63 pp., Sept. 1973. (Order thru GPO, $1.00)

670/2-73-070

Bishop, D.F., T.P. O'Farrell, A.F. Cassell, et al.
Project Officer: Bishop, D.F.
Physical-chemical treatment of raw municipal wastewater. 59 pp., Sept. 1973. (Order thru GPO, $1.05)

670/2-73-071

Homack, P., K.L. Zippler, E.C. Herkert.
Project Officer: Bromberg, A.W.
Utilization of trickling filters for dual treatment of dry and wet weather flows. 118 pp., Sept. 1973. (Order thru GPO, $1.50)

670/2-73-072

Zandi, I.
Project Officer: Oberacker, D.A.
Pneumo-slurry pipeline collection and removal of municipal solid waste. 128 pp., Sept. 1973. (Order thru NTIS, PB-223 162, $8.25)

670/2-73-073

Stamberg, J.B., D.F. Bishop, and A.B. Hais.
Project Officer: Bishop, D.F.
Activated sludge treatment systems with oxygen. 35 pp., Sept. 1973. (Order thru GPO, $.90)

670/2-73-074

Morrison, J.E.
Project Officers: Swanson, C.L., S.A. Hannah, et al.
Study of upflow filter for tertiary treatment. 62 pp., Sept. 1973. (Order thru NTIS, PB-223 354, $5.25)

670/2-73-075

Roan, S.G., D.F. Bishop, and T.A. Pressley.
Project Officer: Bishop, D.F.
Laboratory ozonation of municipal wastewaters. 38 pp., Sept. 1973. (Order thru GPO, $.85)

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Eisenmann, J.L. and J.D. Smith.
Project Officer: Brunner, C.A.
Selective nutrient removal from secondary effluent. 155 pp., Sept. 1973. (Order thru GPO, $1.75)

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Field, R., A.N. Tafuri, R.H. Sullivan, et al.
Project Officer: EWQRL
Combined sewer overflow seminar papers. 216 pp., Nov. 1973. (Order thru GPO, $2.20)

670/2-73-078

Mercer, B.W., A.J. Shuckrow, and G.W. Dawson.
Project Officer: Wilder, I.
Treatment of hazardous material spills with floating mass transfer media. 93 pp., Sept. 1973. (Order thru GPO, $1.25)

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Huber, C.O.
Project Officer: Booth, R.L.
Atomic absorption analysis of phosphates in water. 45 pp., Oct. 1973. (Order thru NTIS, PB-223 338, $4.50)

670/2-73-080
Ross, L.W.
Project Office: MDPC Staff.
Removal of heavy metals from mine drainage by precipitation. 64 pp., Sept. 1973. (Order thru GPO, $1.00)

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Penrose, R.G., Jr. and I. Holubec.
Project Office: MDPC Staff.
Laboratory study of self-sealing limestone plugs for mine openings. 217 pp., Sept. 1973. (Order thru GPO, $2.25)

670/2-73-082
Engelbrecht, R.S., D.H. Foster, et al.
Project Officer: Chambers, C.W.
New microbial indicators of wastewater chlorination efficiency. 67 pp., Feb. 1974. (Order thru GPO, $1.15)

670/2-73-083
Burchinal, J.C.
Project Officer: Clemons, C.A.
A study of institutional solid wastes. 247 pp., Sept. 1973. (Order thru NTIS, PB-223 345, $5.75)

670/2-73-084
Cochran, R.A., J.P. Fraser, D.P. Hemphill, et al.
Project Officer: Dorrler, J.S.
An oil recovery system utilizing polyurethane foam -- A feasibility study. 199 pp., Oct. 1973. (Order thru GPO, $2.35)

670/2-73-085
Rutgers University, Coll. of Agr. & Envir. Sc.
Project Officer: Clemons, C.A.
Poultry manure disposal by plow-furrow-cover. 203 pp., Sept. 1973. (Order thru NTIS, PB-223 430, $5.50)

670/2-73-086

Lackey, L.L., T.O. Jacobs, et al.
Project Officer: Schomaker, N.B.
Public attitudes toward hazardous waste disposal facilities. 181 pp., Sept. 1973. (Order thru NTIS, PB-223 638/AS, $5.25)

670/2-73-087

Heimburg, R.W., A.R. Colella, D. Jones, et al.
Project Officer: Clemons, C.A.
Incineration of plastics found in municipal wastes. 246 pp., Sept. 1973. (Order thru NTIS, PB-223 651/AS, $5.75)

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Matthew, F.L. and E.E. Nesheim.
Project Officer: Librizzi, W.
Demonstration of a non-aqueous sewage disposal system. 69 pp., Dec. 1973. (Order thru GPO, $1.60)

670/2-73-089A

Sarofim, A.F., G.C. Williams, J.B. Howard, et al.
Project Officer: Oberacker, D.A.
Design and control of incinerators, Volume I. 300 pp., Sept. 1973. (Order thru NTIS, PB-223 626/AS, $6.50)

670/2-73-089B

Sarofim, A.F., G.C. Williams, J.B. Howard, et al.
Project Officer: Oberacker, D.A.
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670/2-73-090

Leatherwood, J.M.
Project Officer: Rogers, C.J.
Utilization of fibrous wastes as sources of nutrient. 17 pp., Sept. 1973. (Order thru NTIS, PB-223 625/AS, $3.00)

670/2-73-091

Carlson, O.N. and F.A. Schmidt.
Project Officers: Wilson, D.L. and R. Carnes.
The metallurgical upgrading of automotive scrap steel. 90 pp., Oct. 1973. (Order thru NTIS, PB-223 740, $4.35)

670/2-73-092

Stoddard, C.K.
Project Office: MDPC Staff.
Abatement of mine drainage pollution by underground precipitation. 125 pp., Oct. 1973. (Order thru GPO, $1.55)

670/2-73-093

Lovell, H.L.
Project Officer: Hill, R.D.
An appraisal of neutralization processes to treat coal mine drainage. 347 pp., Nov. 1973. (Order thru GPO, $3.50)

670/2-73-095

Callihan, C.D. and C.E. Dunlap.
Project Officer: Rogers, C.J.
Single-cell protein from waste cellulose. 105 pp., June 1973. (Order thru NTIS, PB-223 873/AS, $3.75)

670/2-73-096

Becker, E.R.
Project Officer: Brunner, C.A.
BOD, solids and nutrient removal by foam flotation. 71 pp., Nov. 1973. (Order thru NTIS, PB-232 184/AS, $7.00)

670/2-73-098

Rains, B.A., M.J. DePrimo, and I.L. Groseclose.
Project Office: AWTRL Staff.
Odors emitted from raw and digested sewage sludge. 68 pp., Dec. 1973. (Order thru GPO, $1.15)

670/2-73-099

MacIntyre, W.G., C.L. Smith, J.C. Munday, et al.
Project Office: EWQRL Staff.
Investigation of surface films - Chesapeake Bay entrance. 168 pp., Feb. 1974. (Order thru GPO $2.05)

670/2-73-100

Wilmoth, R.C.
Project Officer: None.
Applications of reverse osmosis to acid mine drainage treatment. 157 pp., Dec. 1973. (Order thru GPO, $2.00)

670/2-73-101

Barth, E.F. and B.W. Ryan.
Project Officer: Barth, E.F.
Design, construction and initial evaluation of the El Lago AWT facility.
(Pending)

670/2-73-102

Tripfler, A.B., Jr., R.H. Cherry, Jr., et al.
Project Officer: Harris, E.F.
Reclamation of metal values from metal-finishing waste treatment sludges.
(Pending)

670/2-73-103

Green, O., D. VanDam, B. LaBeau, et al.
Project Officer: Barth, E.F.
Ferric chloride and organic polyelectrolytes for the removal of phosphorus. 109 pp., Feb. 1974.
(Order thru GPO, $1.55)

670/2-73-104

Molvar, A.E. and J.F. Roesler.
Project Officer: Roesler, J.F.
Selected abstracts for instrumentation and automation of wastewater facilities. 315 pp., Dec. 1973.
(Order thru NTIS, PB-225 520/6AS, $7.00)

670/4-73-001

Weber, C.I., Editor.
Project Officer: None.
Biological field and laboratory methods for measuring the quality of surface waters and effluents. July, 1973. (Order thru NTIS, PB-227 183, $12.50)

670/4-73-002

Schmer, F.A., D.W. Ryland and F.A. Waltz
Project Officer: Ritter, R.
Investigation of remote sensing techniques for agricultural feedlot pollution detection.
Dec. 1973.
(Pending)

670/4-73-018

O'Herron, R.J.
Project Officer: None.
Performance of the Union Carbide dissolved oxygen analyzer. 17 pp., July 1973.
(Pending)

670/4-73-026

Cancelled.

670/5-73-012

Clark, R.M. and J.I. Gillean.
Project Officer: None.
Systems simulation and solid waste planning: A case study. 36 pp., July 1973. (Order thru NTIS, PB-222 995, $3.00)

670/5-73-020

Bond, R.G., et. al.
Project Officer: Albrecht, O.W.
Study of the economics of hospital solid waste systems. 329 pp. July 1973. (Order thru NTIS, PB-221 681, $9.00)

670/5-73-021

Albrecht, O.W. and R.G. McDermott.
Project Officer: Albrecht, O.W.
Economic and technological impediments to recycling obsolete ferrous solid waste. 62 pp., Oct. 1973. (Order thru NITS, PB-223 034, $3.50)

670/9-73-035

Foster, J.F.
Project Officer: Albrecht, O.W.
Socio-economic factors affecting demand for municipal collection of household refuse. (Condensed from Decision Making and Solid Waste Disposal, University of Chicago, Center for Urban Studies.) 47 pp., Aug. 1973. (Order thru NTIS, PB-225 020/7AS, $3.50)

670/9-73-055

NERC-Cincinnati
Project Office: Technical Information Staff.
Annual report, 1972, NERC-Cincinnati. 94 pp., Aug. 1973. (Order thru NTIS, PB-222 910, $3.75)

670/9-73-056

Shultz, G.R. and D.J. Harmon, Editors.
Project Officer: None.
Active research tasks report, Fiscal year 1973. 367 pp., 1973. (Order thru NTIS, PB-223 567/AS, $6.50)

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670/1-74-001

Clark, R.M. and H.C. Goddard.
Project Officer: None.
Pricing for water supply; Its impact on systems management. 22 pp., Apr. 1974. (Order thru NTIS, PB-231 073/AS, $3.25)

670/2-74-001

LaRosa, P.J., K.A. Ricciardella, and P.J. McGarvey.
Project Officer: Hill, R.D.
Carbonate bonding of taconite tailings.
53 pp., Jan. 1974. (Order thru GPO, $1.00)

670/2-74-002

Moomau, H.F., F.R. Zachar, J.W. Leonard.
Project Officer: Mulhern, J.J.
Feasibility study of a new surface mining method 'longwall stripping.' 67 pp., Feb. 1974.
(Order thru GPO, $1.15)

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Zaval, F.J. and R. Burns.
Project Officer: Harris, E.F.
Mine drainage pollution control demonstration grant procedures and requirements. 110 pp., Jan. 1974.
(Order thru NTIS, PB-230 709/AS, $28.25)

670/2-74-004

Rosenblatt, T.M.
Project Officer: Smith, J.E., Jr.
Optimization and design of an oil activated sludge concentration process. 112 pp., Feb. 1974.
(Order thru GPO, $1.40)

670/2-74-005

Page, A.L.
Project Officer: Dotson, G.K.
Fate and effects of trace elements in sewage sludge when applied to agricultural lands.
97 pp., Jan. 1974. (Order thru NTIS, PB-231 171/AS, $4.50)

670/2-74-006

McMichael, W.F.
Project Officer: None.
Costs of filter pressing domestic sewage sludges. 14 pp., Dec. 1973. (Order thru NTIS, PB-226 130/AS, $3.75)

670/2-74-007

Ulmer, N.S.
Project Officer: Ulmer, N.S.
Physical, chemical, and microbiological methods of solid waste testing. Four additional procedures. 11 pp., Mar. 1974. (Order thru NTIS, PB-231 203/AS, $3.75)

670/2-74-008

Chase, O.F.
Project Officer: Tabakin, R.
Metallic recovery from waste waters utilizing cementation. 36 pp., Jan. 1974. (Order thru GPO, $.85)

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Doyle, F.J., H.G. Ghatt, and J.R. Rapp.
Project Officer: Maneval, D.R.
Analysis of pollution control costs. 437 pp., Feb. 1974. (Order thru GPO, $3.20)

670/2-74-010

McMichael, W.F.
Project Officer: None.
Costs of hauling and land spreading of domestic sewage treatment plant sludge. 19 pp.,Feb. 1974. (Order thru NTIS, PB-227 005/AS, $4.25)

670/2-74-011

McMichael, W.F.
Project Officer: None.
Cost of dissolved air flotation thickening of waste activated sludge at municipal sewage treatment plants. 11 pp., Feb. 1974. (Order thru NTIS, PB-226 582/AS, $2.75)

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Weber, W.J., Jr., and P.J. Usinowicz.
Project Officer: Brunner, C.A.
Adsorption from aqueous solution. 187 pp., Feb. 1974. (Order thru NTIS, PB-232 453/AS, $15.00)

670/2-74-013

Martin, E.J. and G.D. Gumtz.
Project Officer: Lederman, P.B.
State of Maryland waste oil recovery and reuse program. 248 pp., Jan. 1974. (Order thru GPO, $2.70, or NTIS, PB-221 879, $6.00)

670/2-74-014

Brand, B.G.
Project Officer: Carnes, R.A.
Scrap rubber tire utilization in road dressings. 49 pp., Mar. 1974. (Order thru NTIS, PB-232 559/AS, $3.75)

670/2-74-015

Shafizadeh, F., C. McIntyre, H. Lundstrom, et al.
Project Officer: Carnes, R.A.
Chemical conversion of wood and cellulosic wastes. 53 pp., Mar. 1974. (Order thru NTIS, PB-229 246/AS, $6.00)

670/2-74-016

Pfeffer, J.T.
Project Officer: Clemons, C.A.
Reclamation of energy from organic waste. 129 pp. Mar. 1974. (Order thru NTIS, PB-231 176/AS, $4.75)

670/2-74-017

Lippert, T.E. and M.C. Skriba.
Project Officer: Smith, J.E., Jr.
Evaluation and demonstration of the capillary suction sludge dewatering device. 71 pp. Mar. 1974. (Order thru NTIS, PB-232 358/AS, $4.00)

670/2-74-018

Unz, R.F. and S.R. Farrah
Project Officer: Chambers, C.W.
Bacterial zoogloea formation. 87 pp., Apr. 1974. (Order thru NTIS, PB-235 023/AS, $4.00)

670/2-74-019

Guzdar, A.R. and S.S. Rhee.
Project Officer: Oberacker, D.A.
Feasibility of hydraulic transport and treatment of ground household refuse through sewers. 201 pp., Apr. 1974. (Order thru NTIS, PB-229 256/AS, $14.25)

670/2-74-020

Fisk, A.T. and A.D. Guzdar.
Project Officer: Oberacker, D.A.
Preliminary design of a household refuse grinder. Apr. 1974.
(Pending)

670/2-74-021

Monaghan, D.A. and A.R. Guzdar.
Project Officer: Oberacker, D.A.
Feasibility of hydraulic transport of ground household refuse through sewer appurtenances. Apr. 1974.
(Pending)

670/2-74-022

Leiser, C.P.
Project Officer: Willman, J.C.
Computer management of a combined sewer system. 475 pp., July 1974. (Order thru NTIS, PB-235 779/AS, $8.30, or GPO, $5.30)

670/2-74-023

Franco, N.B. and R.A. Balouskus.
Project Officer: Hill, R.D.
Electrochemical removal of heavy metals from acid mine drainage. 87 pp., May 1974.
(Order thru NTIS, PB-232 764/AS, $4.00)

670/2-74-024a

Foran, J.F., A.T. Heenan, and R.G. Schweikhardt.
Project Officer: Albrecht, O.
Raw materials transportation costs and their influence on the use of wastepaper and scrap iron and steel. Vol. I, Technical discussion. 207 pp., Apr. 1974. (Order thru NTIS, PB-229 816/AS, $5.75)

670/2-74-024b

Foran, J.F., A.T. Heenan, and R.G. Schweikhardt.
Project Officer: Albrecht, O.
Raw materials transportation costs and their influence on the use of wastepaper and scrap iron and steel. Vol II, Appendices. 94 pp. Apr. 1974. (Order thru NTIS, PB-229 817/AS, $4.00)

670/2-74-025

Geinapolos, A.
Project Officer: Barth, E.F.
Effect of carbon to nitrogen ratio on activated sludge subsidence and dewatering characteristics. Mar. 1974. (Pending)

670/2-74-026

Sullivan, R.H., M.M. Cohen, J.E. Ure, et al.
Project Officer: Field, R.
The swirl concentrator as a grit separator device.
93 pp., June 1974. (Order thru NTIS,
PB-233 964/AS, $4.50)

670/2-74-027

Barbour, J.F., R.R. Groner, and V.H. Freed.
Project Officer: Rogers, C.J.
The chemical conversion of solid wastes to useful
products. 168 pp., Apr. 1974. (Order thru NTIS,
PB-233 178/AS, $4.50)

670/2-74-028

Cancelled.

670/2-74-029

Cancelled.

670/2-74-030

Barrett, W.J., G.A. Morneau, J.J. Roden, III.
Project Officer: Skovronek, H.S.
Waterborne wastes of the paint and inorganic pig-
ments industries. 86 pp., Mar. 1974.
(Order thru NTIS, PB-232 019/AS, $4.00)

670/2-74-031

Winkler, P.F.
Project Officer: Oberacker, D.A.
An infrared spectral sensor for refuse sorting.
84 pp., Apr. 1974. (Order thru NTIS,
PB-229 901/AS, $7.25)

670/2-74-032

O'Melia, C.R.
Project Officer: Hannah, S.A.
The role of polyelectrolytes in filtration processes.
82 pp., Apr. 1974. (Order thru NTIS, PB-233 271/AS,
$4.00)

670/2-74-033

Richardson, D.L., C.P. Campbell, et al.
Project Officer: Masters, H.E.
Manual for deicing chemicals: Storage and handling.
89 pp., July 1974. (Order thru NTIS,
PB-236 152/AS, $3.70)

670/2-74-034

Wise, R.H..
Project Officer: Wise, R.H.
"Off-the shelf" analyzers for measuring adenosine triphosphate(ATP)in activated sludge. 18 pp., Apr. 1974. (Order thru NTIS, PB-231 345/AS, $3.00)

670/2-74-035a

Wathne. M.
Project Officer: Oberacker, D.A.
First annual report: Routing of solid waste collection vehicles and Appendix A: A linear programming approach for the travelling salesman problem. May 1974. (Pending)

670/2-74-035b

Hong, S.
Project Officer: Oberacker, D.A.
First annual report: Routing of solid waste collection vehicles and Appendix B: Optimal routing of solid waste collection vehicles. May 1974. (Pending)

670/2-74-036a

Liebman, J.C.
Project Officer: Oberacker, D.A.
Routing of solid waste collection vehicles, final report: Appendix A - Manual for use of the computer codes. (Pending)

670/2-74-036b

Mole, J.W.
Project Officer: Oberacker, D.A.
Routing of solid waste collection vehicles: Appendix B - A heuristic solution to the M-postmen's problem. (Pending)

670/2-74-037

Kos, P., P.M. Meier, and J.M. Joyce.
Project Officer: Oberacker, D. and H. Bostian.
Economic analysis of the processing and disposal of refuse sludges. 75 pp., July 1974. (Order thru NTIS, PB 234 498/AS, $4.00)

670/2-74-038

Meier, P.M., J. Kuhner, and R.E. Bolton.
Project Officer: Oberacker, D. and H. Bostian.
Wet systems for residential refuse collection: A case study for Springfield, Massachusetts. 208 pp., July 1974. (Order thru NTIS, PB-234 499/AS, $5.75)

670/2-74-039

Sullivan, R.H., M.M. Cohen, J.E. Ure, et al.
Project Officer: Field, R.
Relationship between diameter and height for the design of a swirl concentrator as a combined sewer overflow regulator. 44 pp., July 1974. (Order thru GPO, $1.00)

670/2-74-040

Lager, J.A. and W.G. Smith.
Project Officer: Field, R.
Urban stormwater management and technology: An assessment. 447 pp., Dec. 1974.
(Pending)

670/2-74-042

S.K. Williams Co.
Project Officer: Risley, C. Jr. and R.B. Tabakin.
Waste water treatment and reuse in a metal finishing job shop. 59 pp., July 1974. (Order thru NTIS, PB-234 476/AS, $3.75)

670/2-74-043

Heeney, J.M., R.B. Neveril, E.K. Krug, et al.
Project Officer: Cesareo, D.J.
Development and evaluation report: Physical chemical marine sanitation system. 69 pp., May 1974. (Order thru NTIS, PB-231 846/AS, $7.00)

670/2-74-044

Robinson, D.J., H.E. Weisberg, G.I. Chase, et al.
Project Officer: Tabakin, R.B. and J. Ciancia.
An ion-exchange process for recovery of chromate from pigment manufacturing. 92 pp., June 1974. (Order thru NTIS, PB-233 641/AS, $4.50)

670/2-74-045

Richardson, D.L., R.C. Terry, J.B. Metzger, et al.
Project Officer: Masters, H.E.
Manual for deicing chemical application practices. 152 pp., Dec. 1974.
(Pending)

670/2-74-046

Wise, R.H.
Project Officer: None.
On-line colorimetric analyzers for monitoring nitrate-nitrite, ammonia, orthophosphorus and total hydrolyzable phosphorus in wastewater treatment process streams. 24 pp., June 1974. (Order thru NTIS, PB-231 990/AS, $4.50)

670/2-74-047

Weber, W.J., Jr. and L.A. Ketchum.
Project Officer: Sanders, W.
Activated silica in wastewater coagulation. 140 pp., June 1974. (Order thru NTIS, PB-232 454/AS, $11.50)

670/2-74-048

Bass, T.D., W. Garner, and A.E. Vandegrift.
Project Officer: Wise, R.H.
Oxygenation of aqueous bodies using liquid oxygen-loxination. 53 pp., June 1974. (Order thru NTIS, PB-232 455/AS, $6.00)

670/2-74-049

Maher, M.B..
Project Officer: Field, R.
Microstraining and disinfection of combined sewer overflows - Phase III. 82 pp., Aug. 1974. (Order thru GPO)

670/2-74-050

Autotrol Corp., Milwaukee, WI.
Project Officer: Wright, D.
Combined sewer overflow treatment by the rotating biological contractor process. June 1974. (Order thru NTIS, PB-231 891/AS, $11.00)

670/2-74-051

Wilmoth, R.C.
Project Officer: None.
Limestone and limestone-lime neutralization of acid mine drainage. 92 pp., June 1974. (Order thru GPO)

670/2-74-052

Weinstein, N.J.
Project Officer: McCarthy, L.T., Jr.
Waste oil recycling and disposal. 328 pp., Aug. 1974. (Order thru NTIS, PB-235 857/AS, $6.50, or GPO, $4.00)

670/2-74-053

McMahon, T.S.
Project Officer: Cesare, D.J.
Combustion toilet for use on small boats. 111 pp., July 1974. (Order thru NTIS, PB-233 175/AS, $9.00)

670/2-74-054

Woodward, J.B.
Project Officer: Librizzi, W.
Sources of oil and water in bilges of great lake ships. 34 pp., July 1974. (Order thru GPO, $.85, or NTIS, PB-233 846/AS, $3.25)

670/2-74-055

Cancelled.

670/2-74-056

Robins, J.H. and A.C. Green.
Project Officer: Cesareo, D.J.
Development of on-shore treatment system for sewage from watercraft waste retention system. 114 pp. July 1974. (Order thru GPO)

670/2-74-057

Mayes, J.H.
Project Officer: Skovronek, H.S.
Characterization of waste waters from the ethical pharmaceutical industry. 66 pp., July 1974. (Order thru NTIS, PB-233 116/AS, $4.00)

670/2-74-058

Cancelled.

670/2-74-059

Byerley, J.J. and K. Enns.
Project Officer: Risley, C., Jr.
Laboratory study of continuous electrooxidation of dilute cyanide wastes. 40 pp., Oct. 1974. (Order thru NTIS; PB-235 588/AS, $3.25;

670/2-74-060

Cancelled.

670/2-74-061

Finger, R.E., G.J. Mason, D.A. Carlson, et al.
Project Officer: Osborn, J.E.
Phosphate removal in an activated sludge facility. 93 pp., Aug. 1974. (Order thru NTIS, PB-235 749/AS, $4.50)

670/2-74-062

Met. St. Louis S.D., and Havens & Emerson, Ltd.
Project Officer: Barth, E.F.
Cost-effective design of wastewater treatment facilities based on field derived parameters. 93 pp., July 1974. (Order thru NTIS, PB-234 356/AS, $4.50)

670/2-74-063
Shuster, W.W., L. Clesceri, S. Kobayashi, et al.
Project Officer: Nadeau, R.J.
Effects of exhaust from two-cycle outboard engines. 305 pp., July 1974. (Order thru NTIS, PB-233 567/AS, $7.25)

670/2-74-064
Cancelled.

670/2-74-065
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Project Officer: Oberacker, D.
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